

Montana Department of Public Health and Human Services
Diagnostic Testing for Suspect Influenza, 2012-13 Season
Laboratory Guidance

Appropriate treatment of patients with respiratory illness depends on accurate and timely diagnosis. Early diagnosis of influenza can reduce the inappropriate use of antibiotics and provide the option of using antiviral therapy.

Specimen Collection

- Specimens should be collected within 24-72 hours of symptoms onset. After 3 days, the viral shedding is reduced, and may no longer be detectable, depending on the assay.
- Respiratory Specimens (nasopharyngeal swabs, throat swabs, nasal swabs, combination NP/Throat swabs, nasal aspirates, nasal washings) must be submitted in Universal Transport Media (UTM) in a cold condition. Failure to submit in Universal Transport Media will cause the specimen to be rejected as an unsatisfactory specimen.
- Do not submit a swab or residual fluid that has been used for Rapid testing; these will be rejected as an unsatisfactory specimen. A second swab must be collected and submitted.
- Universal Transport Media (UTM) can be ordered by contacting the Montana Public Health Laboratory (MTPHL) at 1-800-821-7284. UTM media can be stored at room temperature before specimen collection. However, after the specimen has been introduced to the transport media, it is recommended that the specimen be stored at refrigerator temperature (NOT frozen), and transported to the MTPHL in a cold condition.
- Specimen can be transported via courier or the mail as a Biologic Substance, Category B, and should be received within 48 hours of collection.

Rapid Influenza Diagnostic Tests (RIDTs)

- The sensitivity of RIDTs for detecting Influenza, when compared with viral culture or RT-PCR, range from 50-70%, according to package inserts. A negative RIDT result does not rule out an Influenza virus infection. Specificities, as stated in package inserts range from 90-95%.
- Depending on the prevalence of Influenza in the community, positive and negative predictive values vary considerably. False positives are more likely to occur when disease prevalence is low, and false negatives are more likely to occur when disease prevalence is high.
- MTPHL will confirm positive RIDT results by PCR. If the specimen is positive for Influenza A, subtyping will be performed.
- Specimens from patients testing negative for Influenza with a rapid test should be referred for more sensitive testing (RT-PCR) if determined by the clinician to be highly suspect of Influenza.

Fees

Diagnostic influenza testing is still being offered at a reduced rate for the 2012-2013 season. The fee for an Influenza A and B PCR screen (CPT code 87798) will be \$50 and the fee for Influenza A subtyping (CPT code 87801) will be \$30. Viral culture is also available for \$36.75 (CPT code 87252) with Virus Identification including subtyping at \$28.50 (CPT code 87253)

Requisition Form

- Order Influenza A and/or Influenza B PCR under the Molecular Testing section, not under surveillance.
- In addition to the regular information, please include:
 - Results of Rapid Influenza Testing (if known)
 - If the person is hospitalized

Turn Around Time

- Specimens received in the MTPHL by 8 a.m. (Mon – Fri) will have PCR screening completed by 5 p.m. on the same day of receipt, and in most instances, Influenza A subtyping will also be completed the same day.

If you have any questions, please call the Montana Public Health Laboratory at 1-800-821-7284.